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HEWLETT-PACKARD COMPANY
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EXAMINER	
LIANG, LEONARD S	
ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,607

Applicant(s)

JURRENS ET AL.

Examiner

Leonard S. Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-16 and 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: Paragraph 0015 discloses both a heated roll 100 and a system 100. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-9, 11-15, 21, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Arcaro et al (US Pat 6902643).

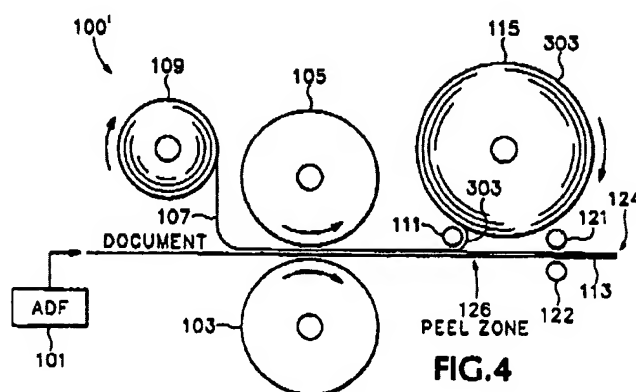
The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Arcaro et al discloses:

- {claim 8} A device for supplying an overcoat sheet to a printed medium (figure 4); a heated roll (figure 4, reference 105); a backing roll that forms a nip with the

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heated roll (figure 4, reference 103); a transport mechanism that moves the printed medium through the nip and a first side of a printed medium against the heated roll (figure 4, reference 121; note that the word "against" is being interpreted broadly; it is not being interpreted as meaning that the first side is "directly in contact with" the heating roller. The first side is being interpreted to be against the heated roll in terms of proximity, although its direct contact with the roll is through the second side); a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink (figure 4, reference 109); wherein the overcoat sheet is fused or attached to the second side of the printed medium at least in part by the heat provided from the heated roll (figure 4, reference 105); wherein the printed medium thermally contacts the heated roll only subsequent to the printed ink having been applied to the printed medium (figure 4, reference 101)



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- {claim 9} wherein the heated roll alone supplies sufficient heat to fuse or attach the overcoat sheet to the second side of the printed medium (figure 4, reference 105)
- {claim 11} including a guidance mechanism that guides the printed medium's path prior to entering the nip (figure 4; inherent)
- {claim 12} wherein the printed ink associated with the second side of the printed medium is dried and the overcoat sheet is applied together in one heating step by the heated roll and the backing roll (figure 4, reference 103, 105)
- {claim 13} wherein the overcoat sheet is a thermal transfer overcoat sheet or a substantially continuous web (figure 4, reference 109)
- {claim 14} A method for applying a sheet to a printed medium (figure 4); providing a printed medium including a first side and a second side, an overcoat sheet, a heated roll, and a backing roll, wherein the heated roll and backing roll form a nip through which the printed medium travels (figure 4, reference 103, 105); transporting the printed medium to the nip formed between the heated roll and the backing roll such that the heated roll heats the first side of the printed medium (figure 4, reference 101, 121, 122); providing a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink (figure 4, reference 107); drying the printed ink and attaching or fusing the overcoat sheet to the second side of the printed medium (figure 4, reference 103, 105); wherein the printed medium

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thermally contacts the heated roll only subsequent to the printed ink having been applied to the printed medium (figure 4, reference 101)

- {claim 15} including the removal of a portion of the overcoat material or sheet (figure 4, reference 126)
- {claim 21} wherein the printed medium curves around at least a portion of the heated roll before being moved through the nip (figure 4, reference 105)
- {claim 24} A device for supplying an overcoat sheet to a printed medium (figure 4); a heated roll (figure 4, reference 105); a backing roll that forms a nip with the heated roll (figure 4, reference 103); a transport mechanism that moves the printed medium through the nip and a first side of a printed medium against the heated roll (figure 4, reference 101, 121, 122); and a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink (figure 4, reference 107); wherein the overcoat sheet is fused or attached to the second side of the printed medium at least in part by the heat provided from the heated roll (figure 4, reference 105); wherein the heated roll alone supplies sufficient heat to fuse or attach the overcoat sheet to the second side of the printed medium (figure 4, reference 105)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Kikuchi et al (US Pat 20020027586).

Arcaro et al discloses:

- {claim 1} A printing device (figure 4); a heated roll (figure 4, reference 105); a first transport mechanism that moves a printed side of a printed medium against the heated roll (figure 4, reference 121, 122); a backing roll that forms a nip with the heated roll (figure 4, reference 103); a means for supplying a separate sheet to the nip (figure 4, reference 109); a second transport mechanism that moves the printed medium to the nip such that the printed medium passes through the nip and the overcoat sheet is fused to the printed side of the printed media (figure 4, reference 101; inherent)
- {claim 6} wherein the separate sheet is a thermal transfer overcoat sheet, laminate, film sheet, or substantially continuous web (figure 4, reference 107)
- {claim 18} wherein the backing roll is not heated (figure 4, reference 103)
- {claim 20} wherein the printed side of the printed medium includes printed ink, and wherein the printed medium does not thermally contact the heated roll prior to application of the printed ink to the printed medium (figure 4, reference 101)

Arcaro et al differs from the claimed invention in that it does not disclose:

- {claim 1} the backing roll being adjustable for changing a distance between the heated roll and the backing roll

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Kikuchi et al discloses:

- {claim 1} the backing roll being adjustable for changing a distance between the heated roll and the backing roll (figure 1, reference 6b)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Arcaro et al into the invention of Kikuchi et al. The motivation for the skilled artisan in doing so is to gain the benefit bringing the backing roll into contact with the heating roll only when needed, thus facilitating sheet feeding.

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Kikuchi et al (US Pat 20020027586), as applied to claim 1 above, and further in view of Pearson (US Pat 6089703).

Arcaro et al, as modified, teaches all limitations of the claimed invention except for the following:

- {claim 3} wherein the backing roll is heated or otherwise provides energy or heat
- {claim 7} wherein the second transport mechanism includes a duplexer or paper-inverting mechanism

Pearson discloses:

- {claim 3} the backing roll is heated (figure 1, reference 28; if the backing roll is defined as the side that does not face the printed side)
- {claim 7} the second transport mechanism includes a duplexer or paper-inverting mechanism (figure 1, reference 46)

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Pearson into the invention of modified Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefits of assisting in the quicker fixing of the printed image and structuring the feeding from the printing function to the overcoating function in a manageable space.

Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Pearson (US Pat 6089703).

Arcaro et al discloses, with respect to claims 10 and 16 a device and a method (as applied to claims 8 and 14 above).

Arcaro et al differs from the claimed invention in that it does not disclose that the backing roll is heated or otherwise provides energy or heat.

Pearson discloses, with respect to claims 10 and 16, that the backing roll is heated (figure 1, reference 28; if the backing roll is defined as the side that does not face the printed side).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Pearson into the invention of modified Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefit of assisting in the quicker fixing of the printed image.

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Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Kikuchi et al (US Pat 20020027586), as applied to claim 1 above, and further in view of Chiba et al (US Pat 4913991).

Arcaro et al, as modified, teaches all limitations of the claimed invention except:

- {claim 19} wherein the heated roll is coated with a non-wetting material

Chiba et al discloses, with respect to claim 19, that heated roll is coated with a non-wetting material (column 5, lines 61-68).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Chiba et al into the invention of modified Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefit of protecting the roll from degradation.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Chiba et al (US Pat 4913991).

Arcaro et al discloses, with respect to claim 22, a device (as applied to claim 8 above).

Arcaro et al differs from the claimed invention in that it does not disclose the heated roll is coated with a non-wetting material.

Chiba et al discloses, with respect to claim 22, that heated roll is coated with a non-wetting material (column 5, lines 61-68).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Chiba et al into the invention of Arcaro et al.

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The motivation for the skilled artisan in doing so is to gain the benefit of protecting the roll from degradation.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Nishikawa et al (US Pat 7086727).

Arcaro et al discloses, with respect to claim 23, a device (as applied to claim 8 above).

Arcaro et al differs from the claimed invention in that it does not disclose comprising a heater or fan for applying heat to the printed medium, a position of the heater or fan being adjustable.

Nishikawa et al discloses a fan for applying heat to the printed medium, a position of the fan being adjustable (claim 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Nishikawa et al into the invention of Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefit of assisting in the drying of the printed medium.

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 6-16, and 18-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Johnstone (US Pat 5520763) discloses an intelligent foil transfer.

Dobashi et al (US Pat 5886727) discloses a thermal transfer printer and printing method therefor.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09/16/06

lsl *LSL*

MS 9/18/06
MANISH S. SHAH
PRIMARY EXAMINER